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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,316

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Horst Grzonka

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03/21/2007

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EXAMINER

LAZORCIK, JASON L

ART UNIT

PAPER NUMBER

1731

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/813,316

Applicant(s)

GRZONKA ET AL.

Examiner

Jason L. Lazorcik

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/29/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-19, 21-28, 30-35 and 37-41 is/are rejected.
- 7) ☒ Claim(s) 7, 20, 29 and 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/040,072.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/29/2004.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,11, 15, 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoffman (US 3,545,453).

Hoffman teaches a method for injecting a liquid [**Claim 2, 16**] preservative from a hypodermic needle into a tobacco rod which is supported upon a fluted cylinder. Where said fluted cylinder is understood as functionally equivalent to the claimed “drum of a cigarette machine” and the Cigar functionally equivalent to the claimed cigarette rod, the tobacco rod is broadly understood to be formed upon a cigarette machine.

While Hoffman is silent regarding an explicit step of “forming” the tobacco rod, it is the Examiners position that such a broad manufacture step is implicitly encompassed in Hoffmans reference to “newly manufactured cigars” (Column 1, Lines 20-27). Alternatively, one familiar with the manufacture of cigarettes would clearly be able to exact a process of forming the tobacco rod.

Claim Rejections - 35 USC § 103

Claims 5, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the appropriate rejections of Claims 1 and 15 over Hoffman (US 3,545,453) as applied under 35 U.S.C. 102(b)/103(a) above.

Art Unit: 1731

With respect to **Claim 5, 17**, Hoffman teaches that the injection apparatus is located in a broader cigar manufacturing process at a point after fabrication of the tobacco column but prior to the final packaging operations. Although the instant reference is directed particularly to treating the tobacco column in the manufacture of cigars, one having familiarity with routine cigarette manufacture would be fully capable of integrating the injection apparatus at an analogous location in a cigarette fabrication. Particularly since a filter tipping operation is performed after formation of the tobacco column but before packaging, the instant limitation wherein the medium is introduced on the drum of a filter assembler of a cigarette machine is deemed obvious over the prior art teachings.

Claims 3, 4, 12-14, 18, 19, 25-28, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 3,545,453) as applied where appropriate to the parent claims 1, 11 and 15, and further in view of Lakritz (US 3,732,872). Lakritz teaches an apparatus designed to uniformly distribute an additive throughout the length of a cigarette. According to the instant disclosure, the syringe or hollow mandrel is first penetrated through the length [**Claim 12, 25, 33**] of the tobacco column followed by simultaneous retraction of the needle at a "even rate of speed" [**Claim 4, 19, 28, 35**] and ejection of the additive fluid (Column 1, lines 56-Column 2, line 3) [**Claim 3, 13, 14, 18, 26, 34**].

Art Unit: 1731

With particular respect to claims 14, 27 and 37 and as indicated in the rejection of Claims 5 and 17 above, one of ordinary skill in the art of cigarette manufacture would be fully capable of integrating the Hoffman injection apparatus at an appropriate location in a cigarette fabrication process. Therefore, **Claim 14, 27, and 37** which requires that the fluid be introduced on "the drum of a filter assembler of a cigarette machine" is deemed obvious over the combined prior art teachings of Hoffman and Lakritz.

Claim 6-10, 21-24, 30-32, and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 3,545,453) in view of Lakritz as applied to the appropriate parent claims above and in further view of Kanki (US 3,837,378).

With respect to **Claim 6, 21, 30, and 38**, The apparatus disclosed by Hoffman does not explicitly teach an arrangement wherein the needle is held upon a carrier drum designed to rotate synchronously along with the drum which secures the tobacco columns. Kanki teaches (see Figs 1, 3, and 8) a device for filling of small vials using a reciprocating hypodermic needles mounted upon a rotary transport plate. The inventors indicate that such an arrangement allows for continuous injection throughput increasing speed and accuracy of the injection operation. Since synchronously rotating injectors of the type set forth in the instant claim are known in the field of fluids handling, it would have been obvious for one of ordinary skill to provide a synchronously rotating needle arrangement as taught in the Kanki reference as a means to enhance injection throughput.

Art Unit: 1731

Regarding Claims 8-10, 22- 24, 31-32, and 39-41, Hoffman teaches (Column 2, line 54-Column 3, line 10) that during an injection cycle, the fluid is forced through the hypodermic needle and ejected onto the tobacco column for the duration of the forward thrust of said needle through the tobacco rod. Fluid flow during an injection cycle is regulated by an interrelated piston head pump [**Claim 9, 22, 32,39**] and valve system [**Claim 10, 24, 31, 41**]. Similarly, the rotating arrangement taught by Kanki utilizes a reciprocating constant volume pump (Column 3, lines 45-58) to meter the injected fluid, however neither disclosure explicitly teaches the use of centrifugal force to eject the fluid. That said, leveraging the centrifugal forces associated with the Kanki rotating apparatus would have been an obvious extension over the prior art. Specifically, the use of centrifugal force to eject fluid into the tobacco column would potentially allow one to downsize the pump associated with the needle or increase the rate of ejection of fluid into the tobacco column thereby decreasing equipment investment costs and enhancing product throughput [**Claims 8, 23, 40**].

Allowable Subject Matter

Claims 7, 20, 29, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art provides ample precedent for devices and methods intended for

Art Unit: 1731

injection of fluids into tobacco columns; see US 2,33,049 to Shapiro et. al., US4,233,995 to Kotuby et. al., US 4,120,309 to Brantl et. al., and German Patent DE 632,490. However none of these either singly or in combination suggest or render obvious the positive step providing spiral grooves on the exterior of the injection needle and rotating said needle in opposing directions during insertion and extraction of the needle from the tobacco column. The prior art reference to Alm et. al. (US 2,250,452) teaches a method of drilling out a central core of a cigar during which operation the drilling members are provided with a rotational motion during the piercing operation. Again, the instant reference is silent regarding any spiral groove structure on the exterior of the drill or in the opposing rotation during insertion and extraction of the drill from the tobacco column. It is therefore the Examiners position that no single reference nor combination of references render obvious the method for supplying a flowable medium to a tobacco rod of a smoking product using a hollow mandrel "with screw-like outer grooves" whereby said mandrel is "inserted into and extracted from the rod with auto-rotation in opposite directions for inserting and extracting".

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Lazorcik whose telephone number is (571) 272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

Art Unit: 1731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLL


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